

A CLINICAL LECTURE ON TOTAL EXTIRPATION OF THE PROSTATE FOR RADICAL CURE OF ENLARGEMENT OF THAT ORGAN:

WITH FOUR SUCCESSFUL CASES.

Delivered at the Medical Graduates' College, London, June 26th.

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In a series of lectures delivered by me in this College in November last, and subsequently published in the form of a small book,¹ I endeavoured to give a practical summary of our recent knowledge of the disease most generally known as "hypertrophy of the prostate," describing its pathology, symptoms, diagnosis, and various methods of treatment. We then saw that there is, perhaps, no other disease in the whole

considerable success; but, apart from the mortality attending the procedure, it possesses the disadvantage that though, as a rule, followed by subsidence of the most prominent symptoms, temporarily at least, and rendering catheterism more easy, in a large proportion of cases the bladder fails to regain its expulsive power. This is simply due to the fact that the outgrowth into the bladder is, as a rule, not the only source of obstruction, which is mainly due to pressure on the urethra by the enlarged lateral lobes. Indeed, I am not aware of a single instance in which, after the bladder had completely lost its expulsive power, namely, when all the urine had to be drawn off by the catheter, that power has been restored by this operation. Add to this the fact that, as only the prominent portions of the prostate are removed, there is no immunity against recurrent outgrowth, or general enlargement of the organ, and we realise in what a limited sense this operation can be regarded as radical.

During the period that has elapsed since these lectures were delivered I have in four cases undertaken a new and, at first sight, very formidable operation for radical cure of the enlarged organ, namely, total extirpation of the prostate, in one

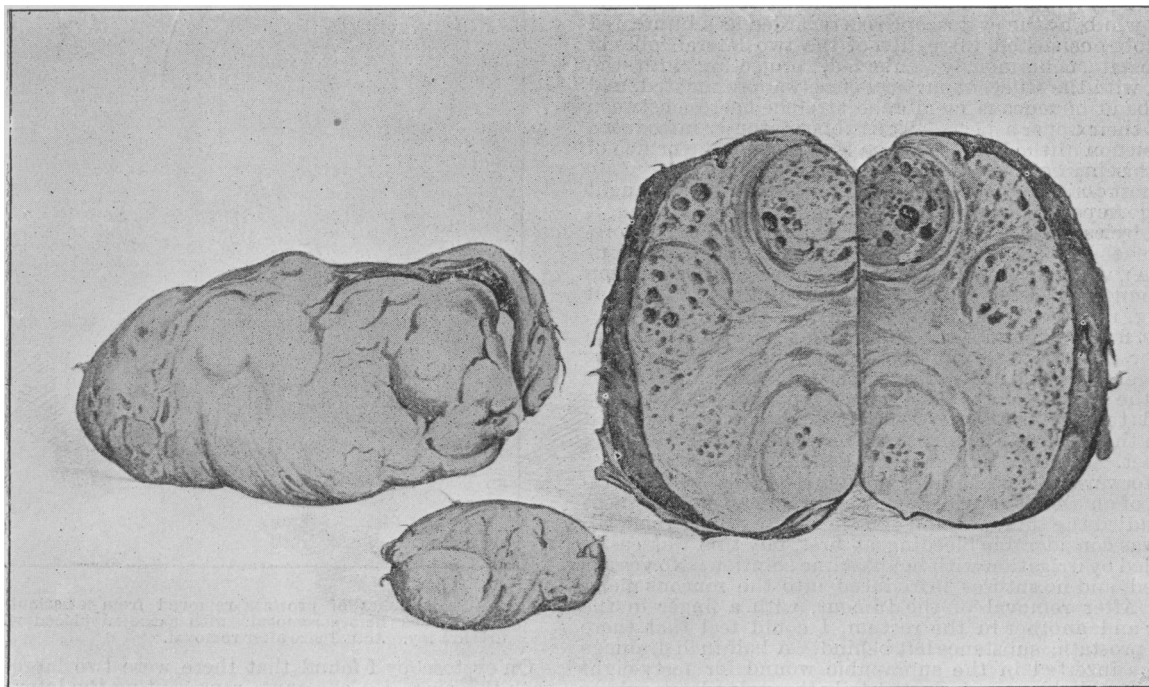


Fig. 1.—Three lobes of enlarged prostate removed from patient aged 69, actual size. A, right lobe cut through, showing the adenomatous nature of growth. B, left lobe. C, "middle lobe."

range of surgery for which so many and diverse modes of treatment have been advocated—a fact in itself suggestive of the unsatisfactory nature of most if not all of them, so that at the present time catheterism pure and simple, with all its drawbacks and disadvantages, reigns supreme in the practice of most surgeons as the least objectionable of all.

From time to time various methods of so-called radical cure by partial prostatectomy, whether by the urethral, perineal, or suprapubic route, have been introduced. I ventured to hold that partial prostatectomy by the suprapubic route, first performed by Belfield, of America, but best known in this country in connection with the name of McGill, who first brought it prominently before the profession in 1888, was the most valuable, as most commonly applicable, and, on the whole, most satisfactory in its results.

The operation consists in opening the bladder suprapubically, and removing the outgrowth into that viscus, or as much of it as possible, by scissors, forceps, and the finger. I myself have performed this operation frequently and with

and all with entire success. These four operations have completely revolutionised my views with regard to the treatment of this painful and widespread malady, and I submit that the complete success with which they have been attended opens up a new and promising era in this field of surgery with far reaching results. I make no apology for entering into each of the cases in detail, so that the method of operating may be fully brought home to you. And in order that you may be in a position to judge of the results I have brought two of the patients here to-day, so that you may question and examine them, and ascertain for yourselves that they are now in perfect health.

CASE 1.—The first patient which I show you, aged 69, was admitted to St. Peter's Hospital on November 21st, 1900. He first attended as an out-patient in September, 1899. Symptoms: Increased frequency of micturition—every hour and a-half by day and hourly by night, difficulty in starting the stream, dribbling at the end of micturition, pain above the pubes before the act. Both the lateral lobes were felt

much enlarged by the rectum, and soft, except that there was a hard nodule in the right. Residual urine, $6\frac{1}{2}$ ounces; directed to use the catheter twice daily. Relieved for a time, but grew worse later on.

From the general enlargement felt by the rectum and the lobes being soft, the case was considered one which, from my own experience and that of my colleagues, vasectomy might be expected to be followed by favourable results. Accordingly, early in January, 1900, double vasectomy was performed, but the results were disappointing.

On February 20th the note was: "No improvement—right lobe hard and painful." Attended as out-patient on and off, the symptoms getting gradually worse, so that he was entirely dependent on his catheter. Sounded two or three times, but with negative results.

I cystoscoped him under an anæsthetic on November 28th, 1900. A large bilobed tumour, with transparent membrane stretched between the lobes, was seen projecting into the bladder. This was diagnosed to be an irregular enlargement of the median lobe, the cystoscope being supposed to have entered beside the pedicle.

On December 1st I performed suprapubic cystotomy. On introducing my finger into the bladder I found that the tumour, which by the cystoscope was regarded as a bifurcated middle lobe, consisted in reality of the two lateral lobes of the prostate, enormously enlarged, projecting into the bladder, with the adjacent surfaces closely approximated, and a thin band of mucous membrane stretched across between them at their upper aspects. The rubber catheter introduced for distension of the bladder lay on the trigone, the orifice of the urethra being below and between the tumours.

The most prominent portion of the right lobe was caught by long forceps, and the mucous membrane covering it snipped by scissors. Through this incision the tip of the forefinger of the left hand was introduced, and this tumour (Fig. 1, A), which constituted the right lobe, separated from its surroundings and enucleated without difficulty. The left lobe (Fig. 1, B) was similarly dealt with. The middle lobe, which at first was not noticeable, was now felt prominent on the floor beneath the mucous membrane. By inserting the finger through the first incision, and hooking it round the middle lobe, this latter, in the form of this rounded tumour (Fig. 1, C), was enucleated, and removed through the incision, the mucous membrane covering it being left intact. During the removal of the lateral lobes the finger passed forwards as far as the triangular ligament. The introduction of an assistant's fingers in the rectum pushed upwards and steadied the tumours, and thus facilitated their removal. There was considerable bleeding at first, but this was easily controlled by irrigation with hot hazeline solution. No vessels were tied, and no sutures introduced into the mucous membrane. After removal of the tumour, with a finger in the bladder and another in the rectum, I could feel that there was no prostatic substance left behind. A half-inch drainage tube was inserted in the suprapubic wound for forty-eight hours. The bladder was irrigated daily through a large rubber catheter passed into the urethra, the fluid flowing out by the suprapubic wound.

On December 13th the patient passed 12 ounces of urine naturally, and all urine passed subsequently through the urethra. The wound was quite healed by December 21st, when his urine was retained two hours and a-half by day and three or four hours by night. His discharge from hospital was delayed till January 23rd owing to an attack of gout. I have now the pleasure of showing you this patient in perfect health. He can retain his urine three or four hours by day and six or seven hours by night, and can pass it at will as easily as ever he did in his life. His urine is quite clear, free from albumen, and normal in all respects. There is no residual urine.

The three tumours removed (Fig. 1) are similar in structure. Each is encapsuled by a strong, thin, fibrous capsule, and contains several smaller tumours, also encapsuled, as seen on section (Fig. 1, A). Microscopically they are found to be adenomata. The three tumours weighed $2\frac{1}{2}$ ozs. on removal.

CASE II.—The second case was one in private practice. This gentleman, aged 67, hearing of this lecture kindly volunteered in the interests of science and humanity to show himself to you to-day. Three years and a-half ago he had

symptoms of enlarged prostate, namely, increasing frequency, difficulty in starting the stream, dribbling, and intermittency of the flow. His private doctor taught him to pass a catheter every night, which he continued to do until January of last year, when he came under my care. I found that the symptoms had continued gradually to get worse, and that there were now $9\frac{1}{2}$ ounces of residual urine. In addition to the other symptoms he had much pain above the pubes, and suffered periodically from gout. I found both lobes of the prostate much enlarged, rounded, slightly nodular, and soft by the rectum; and came to the conclusion that the case was one of adenomatous enlargement of the organ. I advised him to pass his catheter three or four times daily. I saw him from time to time, and on March 19th last he had lost all expulsive power in the bladder, the whole of the urine having been passed for some months by catheter, which he now used five or six times daily. His urine was thick and offensive, containing pus and epithelial cells.

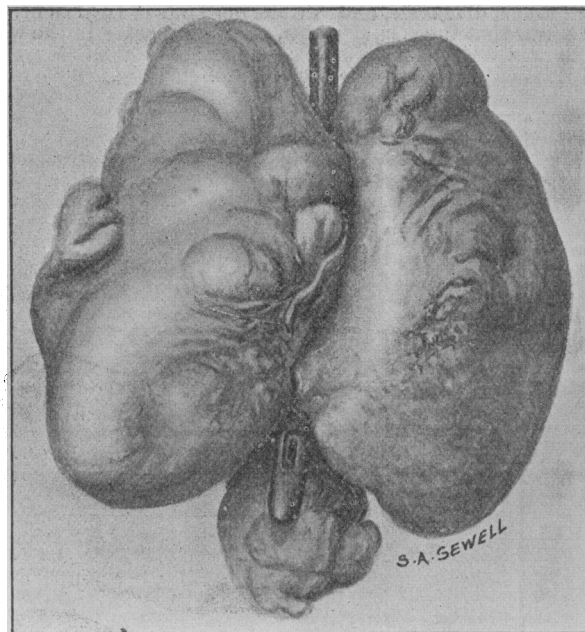


Fig. 2.—Three lobes of prostate removed from a patient aged 67, grouped as before removal, with catheter placed where the urethra lay. Actual size after removal.

On cystoscopy I found that there were two large tumours each the size of a chestnut, representing the lateral lobes of the prostate, projecting into the bladder, with a vertical slit between. On the base of the bladder there was a smaller tumour, the size of a gooseberry, and nodulated. On March 30th I opened the bladder suprapubically, and found the conditions as seen by the cystoscope. It is unnecessary for me to go through the steps of the operation in this case, which was almost a facsimile of the previous one. I show you the three tumours, constituting the prostate, which I enucleated; and this drawing (Fig. 2) shows their exact size, and their grouping before removal, with a catheter placed in the position occupied by the urethra. The tumours were encapsuled, smooth, but nodulated, and structurally similar to those removed in Case I. The lateral tumours measured each $2\frac{1}{2}$ ins. by $1\frac{1}{2}$ in. and $1\frac{1}{4}$ in., and the three weighed $2\frac{1}{2}$ ounces. Captain Hayward Pinch has prepared microscopic sections of these tumours, which, you will see, are pure adenomata. The difference between them and prostatic tissue is that the unstriped muscular fibres have been replaced by fibrous tissue. The acini have no ducts, which is a feature of all adenomata.

This patient made an uninterrupted and complete recovery and left the Surgical Home on May 2nd. He can pass his water without the aid of a catheter without the least difficulty. He can retain it four or five hours by day, and is not dis-

turbed by night. The urine is perfectly clear and normal in all respects; and as you see, and the gentleman tells you, he is in perfect health, and can pass and retain his urine as well as ever he did in his life. He informs me that not alone has his sexual power, which was lost for two years before the operation, returned, but he has emissions of semen, showing that the ejaculatory ducts were unharmed in the operation.

CASE III.—This was a carriage fitter, aged 69, who was admitted to St. Peter's Hospital, April 26th, 1901, for complete retention of urine from enlarged prostate. The usual symptoms of the disease had existed for seven years, but during the last five years they had been extremely acute and distressing. On September 25th, 1897, his bladder was opened suprapubically by a surgeon at one of the large London hospitals (who has kindly given me details of the condition found) for prostatic retention, which neither the patient nor house-surgeon could relieve by the catheter. Vasectomy was also performed, and the bladder allowed to close. No enlargement into the bladder was found. The patient was eleven weeks in hospital and then attended for nine months as an out-patient. He remained fairly well for about ten months after this operation, since which time he had been gradually getting worse. Has passed a catheter on an average five or six times daily for three years, with difficulty sometimes, so that he had to have recourse to various hospitals from time to time to have his urine drawn off. The urine contained pus and blood, and he has had great pain, the symptoms generally being most distressing. He was in great agony on admission to St. Peter's, and, in addition to the bladder troubles, complained of great pain in the loins. Mr. Frankling, the house-surgeon, introduced a coudée catheter, and drew off 5 ounces of foul and bloody urine. As the bladder was distended with blood clot, a lithotrite was introduced and the clot broken up and then evacuated through a cannula by an aspirator. Bleeding continuing and all voluntary power of micturition being lost, a large-sized coudée catheter was tied in. The patient suffered great agony that night, which was only partially relieved by opiates. The following morning he was extremely ill, bawling with agony, from which he was simply distracted. Consequently I was urgently summoned, and forthwith opened the bladder suprapubically. On passing my finger into the bladder I felt an enormous rounded, soft, semi-elastic tumour projecting into its cavity; it lay completely on the left of the urethral opening, the catheter entering the bladder on its right. With a finger of the other hand in the rectum, I felt the tumour in the position of the left lobe of the prostate the size of a large orange. I could detect no right lobe of the prostate. Adenoma of the prostate was diagnosed, but the patient was in such a desperate condition that no attempt at its removal was justifiable. He was extremely collapsed under the anæsthetic; indeed, he seemed moribund. A large drainage tube was inserted in the wound.

Next day the patient had rallied, but was suffering from a severe form of bronchitis which had existed for weeks, and was attended by profuse expectoration of nummular-like sputum. Much to my surprise he rapidly improved in health, and the suprapubic wound was closed in fourteen days, when, however, all his old difficulties returned again, and a catheter had to be tied in, so I determined to remove the tumour.

On May 25th I again opened the bladder suprapubically, making a rather free incision. The mucous membrane over the most prominent part of the tumour was caught up and incised, and the tip of my forefinger introduced through the wound thus made. The tumour was then gradually enucleated from the surrounding structures. This process was slow and somewhat difficult, the tumour being so large that it tightly filled the space between the pubic arch and rectum, so that the finger was passed round it by using considerable force. Tough fibrous bands attached to the sides of the tumour had to be torn through, no easy matter for the finger working in such a confined space. Eventually the tumour was felt lying free in its bed; but it was so large that it could not be delivered thence into the bladder. Hooking my finger round it, with some force I split the tumour in two through its horizontal axis, and then delivered each half separately into the bladder, whence they were withdrawn by forceps through the suprapubic wound. A finger of my other hand in the rectum facilitated the enucleation by steadying the tumour and pushing it into the bladder. The urethra (in which a

catheter was left lying during the operation) with its accompanying structures were left intact, the tumour being stripped off from them. No vessel had to be ligatured, the bleeding being trifling and easily controlled by irrigation by hot boric lotion. A drainage tube was placed in the suprapubic wound for two days, and the bladder irrigated daily through the urethra and out by the wound.

The patient, though extremely weak for a few days and coughing up enormous quantities of offensive sputum, began soon to pick up strength. He passed some urine naturally on June 10th, and wholly in this way after June 13th, when he began to sit up daily. He is now quite convalescent and will be discharged in a few days. His urine is quite clear, passed naturally without the least difficulty, and is retained for two or three hours. This frequency I can state with confidence from my experience of Cases I and II will pass off as the parts settle down to their natural condition.

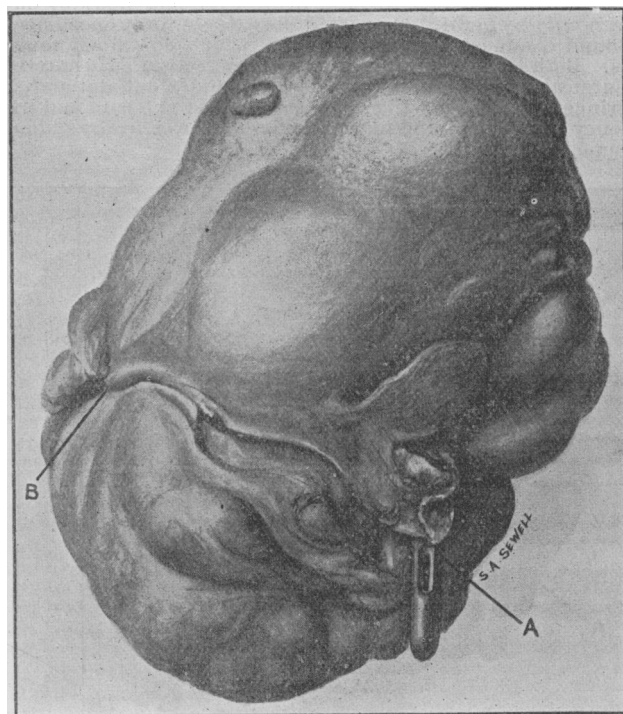


Fig. 3.—Enlarged prostate, weighing $4\frac{1}{2}$ ounces, removed from patient aged 69, exact size. A, catheter placed in position of urethra, on right of tumour. The irregular line between A and B shows where the two lobes were slit asunder during removal.

I pass round the tumour, which weighed $4\frac{1}{2}$ ozs., also a drawing (Fig. 3), which represents its exact size and conformation on removal. It is more or less ovoid in shape, the vertical diameter being $3\frac{1}{2}$ ins. and the horizontal $2\frac{1}{2}$ ins. The surface is smooth but nodulated, and nearly the whole is covered by a thin, strong, fibrous capsule.

A catheter is placed in the furrow about the middle of the inner (right) aspect, showing where the urethra lay. This horizontal slit (Fig. 3, A, B) indicates where the tumour was severed by my finger to facilitate its removal; and, on careful examination, I have come to the conclusion that this slit indicates the natural partition that exists between the two lateral lobes, which gave way before my finger. That is to say, the tumour, which from its position seemed only to involve the left lobe, consists in reality of the whole prostate, which in its gradual enlargement was, for some unaccountable reason, drawn from the horizontal into the vertical position, so that the lower half represents the left lobe and the upper half the right. This disposition accounts for the urethra passing on the right aspect of the tumour, which is in reality its base—an anomaly which will be apparent at

once if we place the right side with contained catheter downwards.

[This patient was discharged from hospital on July 2nd in fairly good health, the cough and expectoration having almost disappeared. His urine was quite clear, passed naturally without any difficulty. On two or three occasions he had pain and tenderness in the left loin, followed by a discharge of pus in the urine, which, however, cleared up in twenty-four hours. No doubt the kidneys were affected as the result of an ascending pyelitis from the prostatic obstruction and cystitis, a complication which renders the recovery from the operation the more remarkable.]

CASE 4.—This gentleman, aged 62, sent by Dr. Douglas, of Newbury, consulted me on May 7th, 1901, for prostatic symptoms which had existed about a year. Six months before he was taught by Dr. Douglas to pass a coudée catheter and wash out his bladder. I found him suffering from the usual symptoms of enlarged prostate, with acute cystitis. He was in great pain, and had to pass urine ever half hour by day and hourly by night. He passed his catheter only once daily. I found 8 ounces of residual urine, which contained much pus. Both lobes of prostate enlarged by rectum. He entered a Surgical Home, and I washed his bladder out daily with astringents. Though the cystitis subsided the pain and frequency continued; and he was particularly worried by sudden stoppage of urine.

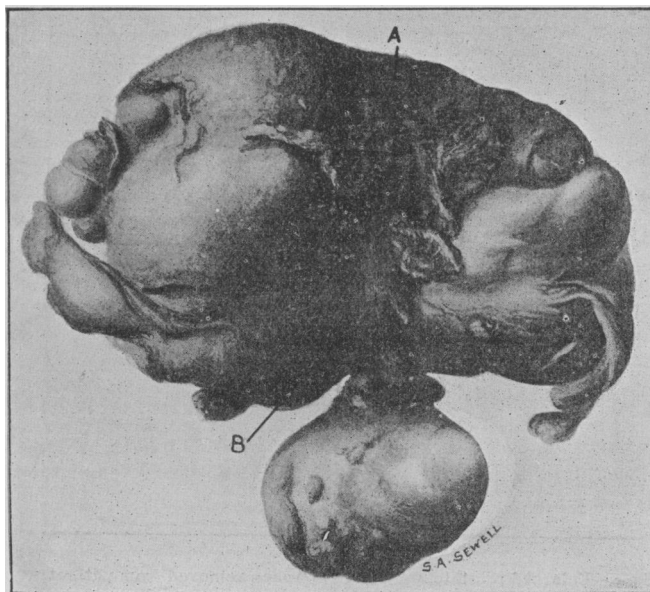


Fig. 4.—Prostate removed as a whole from patient aged 62, showing pedunculated "middle lobe" attached to posterior aspect of right lobe, exact size. The groove A B indicates where the urethra lay; the catheter entered the bladder on the left of the pedicle of the "middle lobe."

On May 13th I cystoscoped him, and found the lateral lobes projecting somewhat into the bladder. The middle lobe was the size of a large gooseberry and pedunculated, acting as a valve to the inner orifice of the urethra. He went home to the country on May 17th; but the symptoms continuing, on the advice of Dr. Douglas, he returned for operation as proposed by me.

On June 7th I opened the bladder suprapubically, Mr. H. Frankling assisting me, and found matters as seen by the cystoscope. I have never felt or seen a more distinctly pedunculated middle lobe—a regular ball-valve, in fact, to the urethra. The catheter passed in on the left side of the pedicle. Grasping the lobe by forceps I incised the mucous membrane on top, and with the finger-nail stripped this off the tumour, the pedicle of which I found tough and strong, attached to the posterior of the prostate. Enlarging the opening in the mucous membrane with my finger I gradually enucleated the left lobe from its bed, commencing first at the

base and then going on to the side and front, the finger passing forward to the triangular ligament. Then I attacked the right lobe in the same way. The whole prostate (Fig. 4) came away from beneath the urethra, which passed along a groove (Fig. 4, A, B) on its upper surface. Strong bands of fibrous tissue had to be torn across by the finger in the course of the enucleation. The finger of my other hand in the rectum much facilitated the removal; in fact, without this manipulation it would be impossible to enucleate the organ. The hæmorrhage was trifling and easily subdued by irrigation by hot lotion.

The enucleated prostate (Fig. 4) weighed 2½ ounces. The lateral lobes are less lobulated than in any of the other three specimens, the adenomatous growth being less advanced. It is difficult to say whether what appears to be a middle lobe springs from the "median portion" of the prostate or from the posterior aspect of the right lobe.

It is unnecessary to enter into details of the after-treatment, which were the same as in the other cases. The urine being ammoniacal at the time of operation, there was much formation of phosphatic grit in the wound, which retarded its closure. On June 12th several ounces of urine were passed naturally, and since then the quantity passed in this way has daily increased. There has been scarcely any rise of temperature throughout and the patient is now convalescent.

[This gentleman left the surgical home for the country to pursue his usual occupation on July 11th. Before his departure I had the pleasure of showing him in excellent health, untroubled by any urinary symptoms, to my friend Dr. Farquharson, M.P., and other well-known medical men. He passes his urine, which is normal in all respects, as freely and easily as he did at any period of his life, and can retain it all night and for four or five hours in the daytime.]

Captain Hayward Pinch reports: "All four specimens of prostatic tumours removed by Mr. Freyer when examined microscopically prove to be true adenomata. Some slight variations in structure were observed in the different specimens, the chief one of which was a varying tendency to cystic degeneration. This condition obtains most in Cases III and IV, more particularly the latter. The character of the epithelium lining the acini was short columnar, and in every respect identical with that present in the normal prostate. The stroma, however, differed in that the amount of unstripped muscular tissue was very small, and was replaced almost entirely by fibrous tissue."

The first question that will naturally suggest itself to your minds in connection with the operation is this, What happens to the prostatic portion of the urethra during its performance? In order that you may clearly grasp what takes place with regard to this canal, as well as some other features of the operation, I will briefly recall the structural features and external relations of the prostate.

This body is in reality composed of twin organs, of purely sexual function, which in some of the lower animals remain separate and distinct throughout life, as they do in the human male during the first four months of foetal life. After that period they approach each other, and their inner aspects become agglutinated together, except along the course of the urethra, which they envelop in their embrace. But the two glandular organs constituting the two lateral lobes of the prostate, though welded together, as it were, remain, so far as their secreting substance and functions are concerned, practically as distinct as the testes, their respective gland ducts opening into the urethra on either side of the veru montanum. Each of these two glandular bodies is enveloped by a thin, strong, fibrous capsule. These latter, except those portions of them that cover the opposing aspects of the glandular bodies, or lobes, which dip inwards and disappear in the substance of the prostate, together constitute the true capsule of the prostate as a whole. This extends over the greater portion of that organ, being deficient only along the upper and lower commissures, or bridges of tissue that unite the lateral lobes above and below the urethra, thus filling the gaps between them. (For descriptive purposes the prostate is supposed to lie with its rectal aspect downwards.)

The urethra, accompanied by its surrounding structures—namely, its longitudinal and circular coats of muscle, continued forward from the bladder, its fibrous and elastic

tissues, its vessel and nerves, passes forward between, and is embraced by, the inner aspects of the two glands. The ejaculatory ducts enter the prostate close together, in an interlobular depression, at the lower part of its posterior aspect, each coursing along the inner surface of the corresponding lobe. They do not penetrate the capsules of the lobes, but pass forward in the interlobular tissue, to open into the urethra. The prostate, thus constituted and enveloped by its true capsule, is further encased in a second capsule, or sheath, formed from the pelvic fascia, numerous connecting bands passing between the two. In the space between these two capsules lies the prostatic plexus of veins, particularly in front (above) and on the sides of the prostate; and these veins in subjects of enlarged prostate are frequently of enormous size. The larger branches of arteries also lie between the true capsule and the sheath, numerous small branches passing from them through the capsule for the supply of the prostatic substance.

In most, if not in all, cases of enlargement of the prostate the overgrowth is of a purely adenomatous character, numerous encapsulated tumours being found embedded within the substance of the lobes, as seen in Fig. 1, A; and sometimes protruding from their surfaces in the form of polypoid outgrowths, which, however, are invariably enclosed within the true capsule, which is pushed before them.

Now, as the lateral lobes enlarge, they bulge out and have a tendency, each contained within its own capsule, to become more defined and isolated, thus recalling their separate condition in early foetal life. They separate and shake themselves more or less loose from the commissures, or bridges of tissue that in the normal prostate unite them above and below the urethra. And in the course of this change the urethra, with its accompanying structures, is pushed towards the surface of least resistance. Thus in Cases I and II (Figs. 1, 2) it lay beneath and between the lateral lobes. In Case III (Fig. 3) it lay on the right side, though in reality at the base and between the lateral lobes, the whole organ in its enlargement, for some unaccountable reason, having turned on its edge, so that its base was placed vertically and looking to the right. In Case IV (Fig. 4) the urethra lay above and between the lobes, which had separated from each other in this direction, but remained still attached along the lower commissure.

In the removal of the prostate by the method under consideration, whether as a whole or in separate lobes, the organ is enucleated in its capsule from the surrounding sheath, and then stripped off the urethra, which with its enveloping tissues is left intact.

The ejaculatory ducts are also left uninjured when the lobes come away separately, or the urethra is pushed beneath them. But I am not certain as to what happens—whether they remain intact or are torn across—when, as in Case IV, the prostate comes away as a whole, and the lobes are not detached from each other along the inferior commissure. But this is a matter of trifling importance at an age when, as a rule, the reproductive power is lost.

In enucleating the prostate out of its sheath, the fibrous bands that pass between the sheath and the true capsule are torn through, but the prostatic plexus of veins and large branches of arteries are left behind, only the smaller vessels passing to and from the prostatic substance through the capsule being severed. This accounts for the trifling hæmorrhage that takes place in this operation in comparison with the profuse bleeding that sometimes occurs in various forms of partial prostatectomy when the prominent parts in the bladder are cut, or torn off by forceps, the large veins and arteries being thus opened up.

The large cavity left after enucleation of the prostate rapidly contracts, by the inherent elasticity of the sheath, the contractility of the surrounding muscles, and pressure from the neighbouring parts. Indeed, after irrigation by hot lotion to control the bleeding, there is scarcely any cavity felt by the finger in the bladder. Its surfaces are brought into close apposition with the tissues round the urethra, and, both tissues being very vascular, union in large part by first intention probably takes place. To obviate the danger of pus accumulating in this cavity the idea of passing a drainage tube from it out through the perineum has been entertained; but I have hitherto not found this necessary. This could,

however, be easily accomplished, if thought desirable, without opening the urethra.

One of the most remarkable features of this operation is the complete restoration of the power of voluntary micturition after habitual catheterism had been employed for lengthened periods, in Case III for five or six years. It may interest you to hear the opinions of two eminent surgeons, one in this country and one on the Continent, as to the possibility of this occurring. Sir H. Thompson in the last edition of his *Diseases of the Urinary Organs* writes: "When it has been necessary to practise habitual catheterism for retention from enlarged prostate during a period of one or two years, the coats of the bladder lose their power and are incapable, I believe, of regaining it in almost any case after that lapse of time, and would fail to expel their contents, even supposing the obstruction to be entirely removed. There is good ground for concluding that no operation would restore a *status quo* on account of our inability to restore the expelling function to a bladder which has long ceased to exercise it."

And M. Guyon in his *Leçons Cliniques* (1888) writes: "Voyez, en avant, ces lourdes masses qui représentent les lobes latéraux, fortement appliqués l'un contre l'autre et qui opposent un obstacle certainement plus considérable que le lobe moyen à l'écoulement de l'urine. Croyez-vous qu'il soit jamais possible d'en pratiquer aussi l'ablation?"

"Et quand un tel prodige opératoire deviendrait réalisable, croyez-vous que la vessie, après avoir été plus ou moins longtemps soumise à la distension, pourrait recouvrer son intégrité anatomique et fonctionnelle? Croyez-vous que les lésions histologiques dont sa couche musculaire et sa muqueuse sont atteintes, et celles qui portent sur la substance rénale, seraient aussi susceptibles de rétrograder? Il est évident que toutes ces lésions, et vous savez qu'elles sont à peu près constantes, mêmes dès le début de la maladie, ne peuvent relever d'aucune intervention opératoire, et je puis ainsi conclure que le traitement radical de l'hypertrophie de la prostate n'existe pas et ne saurait exister."

The italics are mine. The very decided opinions expressed by these two distinguished surgeons—opinions based on purely theoretical grounds—have, happily, been entirely falsified by the results of these four cases; for not only has the enlarged prostate been ablated in each instance, but the expulsive power of the bladder has been completely restored after that power had been lost for periods varying from six months to four or five years.

When we reflect that a very large proportion of the male population beyond 50 years of age suffer from this distressing malady, and that the majority of these are eventually carried off by the disease after a life of misery, and frequently of agony, we can imagine the blessing to humanity of any operation that effects a radical cure. I think I shall not be accused of exaggeration when I state that all previous so-called methods of radical cure of enlarged prostate are unsatisfactory, and that catheterism, though the least objectionable mode of treatment in the vast majority of cases, is liable sooner or later to terminate in cystitis or other dangerous complication. I submit that the thoroughly successful results obtained in these four cases of total extirpation of the enlarged prostate encourage us in the hope that we have at last arrived at a rational method of dealing with this painful and frequently fatal malady.

REFERENCE¹

¹ *Clinical Lectures on Stricture of the Urethra and Hypertrophy of the Prostate.* Baillière, Tindal, and Cox, London.

ARSENICAL POISONING IN INFANCY.—A case of arsenical poisoning has recently been recorded in an infant, aged 6 months, which lay in a bassinot lined with blue "satinette." The urine contained albumen, blood, and hyaline casts, in addition to arsenic, and arsenic was found in the blue lining of the bassinot.

DINNER TO PROFESSOR KOCH.—On July 24th, in connection with the Tuberculosis Congress, a dinner will be given by the Royal Institute of Public Health in honour of Professor Robert Koch, M.D. Among others who are expected to be present are Lord Lister, Lord Strathecona, G.C.M.G.; Lord Edmond Fitzmaurice, Sir William Broadbent, Sir James Blyth, Sir J. Crichton-Browne, Professor Brouardel, the Hon. F. W. Peel, M.P.; and the Right Hon. J. A. Campbell, M.P.